



## Abstract of the Disclosure

[0011]           A control/propulsion system for a model submarine 4 to 7 ft. in length, (can vary within reasonable limits) using bilge pumps, RC components, and exacting ballast to make the submarine completely functional without any external moving parts such as propeller, rudder, and dive planes. Unlike most model submarine's which use external moving parts for directional control such as propeller, dive planes and rudder, the proposed control/propulsion system accomplishes complete directional control without the use of any external moving parts. This is accomplished with bilge pumps providing jet water thrust through fixed nozzles for all directions, forward, reverse, left, right and down. Since the submarine is positively buoyant the cessation of forward thrust allows the submarine to surface. This is an added safety feature in case of loss of radio signal. Additionally the functional components of the proposed control/propulsion system are extremely simple compared to other typical model submarines. The major components are simply a battery, to supply power, a watertight chamber, housing the radio and electrical components, bilge pumps, to provide jet water thrust, and fixed directional nozzles and plumbing to provide desired directional control. The simplicity of this system greatly enhances the reliability of the model submarine and provides trouble-free operation for many hours without the concern of losing the submarine.